



Sharesource

Remote Patient Monitoring

EVIDENCE SERIES: **STUDY**

**Remote monitoring
of peritoneal dialysis:**

Evaluating the impact of the
Claria Sharesource system

Eleri Wood, et al.



BACKGROUND

- > Although PD is a valued therapy option because it is home-based, flexible and allows patients to be largely autonomous, the proportion of renal replacement therapy-dependent patients who are on PD remains low at 5.9%.
- > Potential barriers to PD include patient anxieties about the safety or their ability to perform their own therapy without direct medical supervision, combined with clinicians' concerns about their ability to determine patients' adherence.
- > Remote patient management (RPM) provides the opportunity to overcome some of these barriers.



OBJECTIVES

- > To evaluate the impact of **Homechoice Claria** with **Sharesource** and discuss the findings relating to clinicians' and patients' experiences and its impact on the working activities of PD nurses.



ENDPOINTS

- > Clinician and patient experience
- > Resource utilisation



METHODS

Data were collected through 3 processes:

1. Longitudinal observations - to log the **time** PD nurses spend on different types of tasks, specifically whether the task is: **proactive**, **reactive** or **routine**.



Proactive
Reactive
Routine



Proactive tasks: anticipatory, preventative and change oriented, such as clinician discussions, phone calls/visits to patients and reviewing daily dialysis records. **Reactive tasks:** responsive, such as urgent patient consultations and assessments. **Routine tasks:** regular planned activities, such as scheduled line changes and review consultations.

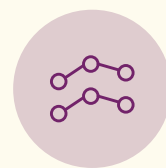


2. An **online questionnaire** completed by PD nurses before their unit introduced **Homechoice Claria** with **Sharesource** and again afterwards to gather information around time management, logistics, support, and satisfaction with APD.
3. **Telephone interviews** - Patients and nurses were interviewed both pre- and post-introduction of **Homechoice Claria** with **Sharesource**, but doctors were only interviewed afterwards, as it was felt they have a more holistic view of unit-wide impacts. All interviews gathered information about the logistics of and satisfaction with the APD system in use at that time.



RESULTS

- > A total of 47.25 hours of nursing time were analysed.
- > A total of 25 nurses from 14 units completed questionnaires pre-device and 17 from 10 units completed post-device questionnaires, at which time the mean number of patients using **Homechoice Claria** with **Sharesource** in each unit was 31.
- > 7 physicians from 7 units participated in interviews.
- > A total of 19 patients participated in both pre- and post-device interviews, 13 of whom switched to **Homechoice Claria** with **Sharesource** between interviews.



After implementation of
Homechoice Claria with **Sharesource**

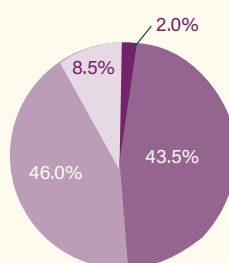
Proactive tasks
INCREASED
TO **34%**

while time spent on
reactive activity
dropped from
43.5% to **27%**

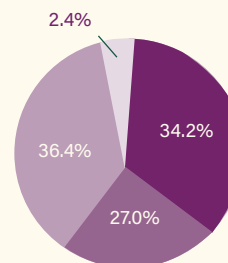
ALL PARTICIPANT
GROUPS FELT THAT
HOMECHOICE CLARIA
WITH **SHARESOURCE**
ENABLED **EARLIER**
IDENTIFICATION AND
REMEDIAL ACTION OF
DIALYSIS ISSUES



1a. Pre-device



1b. Post-device



Proactive
Reactive
Routine
Non specified

Figure 1. Percentage of time spent on proactive, reactive and routine activity pre- and post-**Claria Sharesource**

- > Initial observations showed that only 2% of nursing time was spent on proactive tasks (Figure 1a).
- > Time spent on routine activity dropped from 46% to 36.4% (Figure 1).
- > There was a fall in the mean number of routine visits per year reported by patients from 6.46 to 4.3 and mean reported clinic visit length falling from 55 to 34 minutes.
- > This was accompanied by an increase in the frequency with which nurses reviewed patients' dialysis data.



"Spot issues with dialysis sooner, able to change prescriptions remotely."



Nurse

"Hospital can see information. Flag up problems a lot sooner rather than waiting 2-3 months."



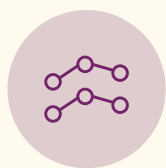
Patient

"Early action for adherence and intervention of problems."

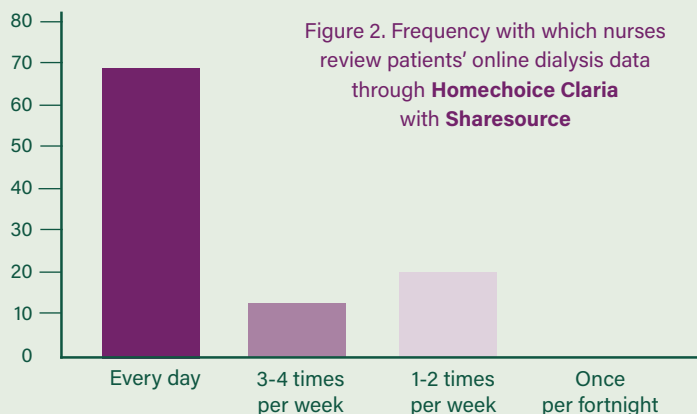


Doctor





RESULTS



Satisfaction:

- > When asked to rate on a scale of 1 to 10 their satisfaction with **Homechoice Claria** with **Sharesource**, doctors gave a mean rating of **7.75** and nurses **8.29**, up from 7.3 for standard APD.
- > Patients appeared more satisfied than clinicians: patients' initial mean rating was 9.3, which remained almost as high at 9.15 for those who switched to **Homechoice Claria** with **Sharesource** but rose to 9.67 for those who remained on standard APD.



After the introduction of **Homechoice Claria** with **Sharesource**, **68.8%** of nurses reported remotely reviewing patients' dialysis data daily, and none less frequently than once per week



CONCLUSIONS

This preliminary evaluation provides evidence that the **Homechoice Claria** with **Sharesource** APD system changes the experience and actions of patients and clinicians and that user **satisfaction levels are generally high**.

- > Important to consider that its impact may be complex and not entirely as expected.
- > Need for randomised-controlled trials or large observational registry studies to ascertain long term use in patients and renal services.

For safe and proper use of products mentioned herein refer to appropriate operations manual.

Reference: Eleri Wood - Kidney Nurse Consultant, King's College Hospital, London
Kate McCarthy - Medical Scientific Liaison: Renal Care, Vantive Healthcare,
Mary Roper Knowles - Managing Director, Loyalty Chain, Derby, UK Journal of
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